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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,151	08/27/2003	Gregory Frank Carlson	10030414-1	7046

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AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599

EXAMINER

LAM, CATHY FONG FONG

ART UNIT PAPER NUMBER

1775

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/650,151

Applicant(s)

CARLSON ET AL.

Examiner

Cathy Lam

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12, 13 and 22-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-13, 22-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

In view of the amendment and remarks filed on September 12, 2005, the pending claims continue to be unpatentable as following:

Claim Objections

1. Claim 7 is objected to because of the following informalities: applicant should place a -- , -- after "vinylene". Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 26, "the wells" lacks antecedent basis.

Claim Rejections - 35 USC § 102

3. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Verlinden et al (US 6861136).

Verlinden discloses a flexible laminate comprised of a flexible support (1) and a thin glass layer. The thin glass layer is comprised of a plurality of glass sheets (2) which are separated by a space (3) (Fig. 1).

The examiner takes the position that the thin glass layer laminated onto the flexible support resembles the substrate of the present invention, and the space (3) forms grooves between the glass sheets are the wells and ridges claimed by the applicant.

Regarding to the conductive polymer that forms circuit devices, the examiner is taking the position that applicant has not positively recited the conductive polymer in the

claims. The newly added claim language is for intended use, thus no patentable weight is given.

Claim Rejections - 35 USC § 103

4. Claims 4-10, 12-13 and 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jacobsen et al (US 6468638) in view of Verlinden (US 6861136).

Jacobsen disclose an electronic assembly comprised of a substrate (12) and a plurality of blocks (14).

Recesses or holes are formed in the substrate before the blocks are formed onto the substrate (col 6 L 28-34). The blocks may each contain a circuit component (col 2 L 11-16, L 45-47 & col 5 L 23-24).

The blocks (14) are deposited onto the substrate (12) through FSA (or fluidic self assembly) process that is a fluid transporting process such that the blocks rest in the corresponding openings in the substrate (12) (col 2 L 55-60 & col 6 L 48-49). The examiner takes the position that the FSA process resembles a chemical treatment that limit the sizes of the blocks.

An interconnecting layer is deposited over the substrate and the blocks to make electrical connection through conductive holes (col 6 L 48-53). The interconnecting layer can be a wiring pattern (ie. row and/or column interconnects) (col 6 L 63-64). The blocks that include circuit elements drive a picture element (or a display) (col 6 L 48-51).

Jacobsen however teaches that the interconnecting layer which is used for connecting the blocks, is a conductive polymer or a conductive organic compound (col 6 L 55-58). The interconnection of the display comprises transistors (col 2 L 1-5).

Verlinden teaches a laminate structure having wells and/or ridges formed on a surface. The wells or ridges are filled with an organic conductive polymer such as poly(p-phenylenevinylene) (col 8 L 6-10).

In view of the prior art teachings, one skill in the art would choose poly(p-phenylenevinylene) because PPV is a commonly picked electroluminescent material (col 8 L 22-30).

Response to Arguments

5. Applicant's arguments filed on September 12, 2005 have been fully considered but they are not persuasive. Applicant in the remarks argues that Jacobsen and verlinden can not be combinable and modifying the teaching of one reference by incorporating the teaching of the other would not meet the claimed invention.

6. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cathy Lam whose telephone number is (571) 272-1538. The examiner can normally be reached on 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Deborah Jones can be reached on (571) 272-1535. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cathy Lam
Primary Examiner
Art Unit 1775

cfl
November 28, 2005